

from the spirit of the invention, and it is intended to claim all such changes and modifications as fall within the true scope of the invention.

What is claimed is:

1. A single phase formulation for a homogeneous gum base composition containing an elastomer and a resin in the absence of ester gums required to compatibilize said elastomer comprising a plasticized styrene-butadiene elastomer and a plasticized resin, said elastomer being plasticized to make it compatible with other gum base components by adding a plasticizer selected from the group consisting of butyl stearate, butyl oleate, glyceryl trioleate, oleic acid, and mixtures thereof in an amount sufficient to permit formation of the single phase homogeneous admixture, said plasticized resin being plasticized to make it compatible with other gum base components and with said styrene-butadiene elastomer by adding a plasticizer in an amount sufficient to permit formation of the single phase homogeneous admixture.

2. A gum base composition as in claim 1 wherein said resin is selected from the group consisting of polyvinyl acetate, polyvinyl butyl ester, copolymers of vinyl esters and vinyl ethers, polyethylene, ethylene-vinyl acetate copolymers, vinyl acetate-vinyl alcohol copolymers, and vinyl acetate-vinyl laurate copolymers.

3. A gum base composition as in claim 2 wherein said resin is polyvinyl acetate which has a molecular weight of at least about 20,000.

4. A gum base as in claim 1 wherein the softness is at least about 15 one-tenth millimeters as measured with a penetrometer according to ASTM D-1321 with 100 grams at about 24.5° C.

5. A gum base as in claim 4 wherein the softness is at least about 20 one-tenth millimeters.

6. A gum base as in claim 5 wherein the softness is at least about 25 one-tenth millimeters.

7. The gum base of claim 1 wherein said resin is properly plasticized with a plasticizer selected from the group consisting of glyceryl triacetate, glyceryl tributyrate, trimethyl citrate, benzyl benzoate, benzyl butyrate, benzyl phenyl acetate, butyl-2-decenoate, citronellyl butyrate, cresyl acetate, ethyl acetate, diethyl malonate, diethyl sebacate, ethylacetoacetate, diethyl tartrate, ethyl lactate, butyl lactate, acetyl triethyl citrate, diethyl succinate, diethyl malate, lactic acid, sucrose octaacetate, diacetyl tartaric acid ester of mono- and diglycerides, stearyl mono-glyceridyl citrate, castor oil, succinylated monoglycerides, or lactic or glyceryl lacto esters of fatty acids, alone or in combination with acetylated monoglyceride.

8. The gum base of claim 7 wherein said resin is properly plasticized with a plasticizer selected from the group consisting of glyceryl triacetate, glyceryl tributyrate, diethyl sebacate, acetyl triethyl citrate, ethyl acetoacetate, ethylacetate, alone or in combination with acetylated monoglyceride.

9. The gum base of claim 1 which is made in the absence of filler.

10. The gum base of claim 1 which also comprises filler selected from the group consisting of  $\text{CaCO}_3$ , aluminum hydroxide, alumina, magnesium carbonate, dicalcium phosphate, talc ( $3\text{MgO} \cdot 4\text{S} \cdot \text{O}_2 \cdot \text{H}_2\text{O}$ ), magnesium trisilicate, magnesium hydroxide, silica gel, aluminum silicates, organic fillers, and combinations thereof.

11. The gum base of claim 10 wherein the filler is  $\text{CaCO}_3$ .

12. The gum base of claim 10 wherein the filler is talc.

13. The gum base of claim 1 wherein said elastomer further comprises other masticatory substances of natural origin including rubber latex solids, chicle, crown gum, nispero, rosindinha, jelutong, pendare, perillo, niger gutta, or tunu.

14. The gum base of claim 1 wherein said elastomer is present in said gum base in an amount of from 0.5 to about 30% by weight.

15. The gum base of claim 14 wherein said elastomer is present in an amount of from about 5% to about 20%.

16. The gum base of claim 1 wherein said plasticizer for said elastomer is present in an amount of from about 0.5% to about 40% by weight of said gum base.

17. The gum base of claim 16 wherein said plasticizer is present in an amount of from about 10% to about 25% by weight.

18. The gum base of claim 1 wherein said resin is present in said gum base in an amount of from about 5% to about 75% by weight.

19. The gum base of claim 18 wherein said resin is present in an amount of from about 10% to about 45% by weight.

20. The gum base of claim 18 wherein said plasticizer is present in an amount of from about 1 to about 25% by weight of said gum base.

21. The gum base of claim 20 wherein said plasticizer is present in an amount of from about 2% to about 15% by weight of said gum base.

22. A chewing gum prepared using the base as in claim 1 which includes sweeteners selected from the group consisting of mono- and disaccharides, intense sweeteners of artificial or natural origin, sugar alcohols, hydrogenated starch hydrolysates and corn syrup.

23. The gum base composition of claim 1 which further comprises a third component comprised of fillers, emulsifying agents, softening agents, texturizing agents and waxes.

24. A method of producing a single phase homogeneous chewing gum base composition in the absence of gum base components other than an elastomer and a resin comprising:

plasticizing an elastomer component selected from the group consisting of styrene-butadiene, polyisobutylene and isoprene-isobutylene copolymer sufficiently so that it is compatible with a resin component as well as other gum base ingredients by adding a plasticizer, in the case of styrene-butadiene, selected from the group consisting of butyl stearate, butyl oleate, glyceryl trioleate, oleic acid, and mixtures thereof, and, in the case of polyisobutylene and isoprene-isobutylene copolymer, selected from the group consisting of polylimonene, petrolatum, liquid petroleum hydrocarbons, squalane, squalene, and mineral oil in an amount sufficient to permit the formation of the single phase homogeneous admixture,

plasticizing a resin component selected from the group consisting of polyvinyl acetate, polyvinyl butyl ester, copolymers of vinyl esters and vinyl ethers, polyethylene, ethylene-vinyl acetate copolymers, vinyl acetate-vinyl laurate copolymers sufficiently so that it is compatible with an elastomer component by adding a plasticizer selected from the group consisting of glyceryl triacetate, glyceryl tributyrate, diethyl sebacate, acetyl triethyl citrate, ethylacetoacetate, alone or in combination with acetylated monoglyceride in an